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ABSTRACT

This guide was developed as a "how to" training device for constructing spreadsheet files using AppleWorks on the Apple IIe computer with a Duodisk or two disk drives. Step-by-step instructions are provided for program loading, selecting the spreadsheet option, setting column widths, naming columns and fields, justifying labels and values, centering labels, formatting values, and using formulas for calculating cell sums and quotients. For each procedure, a diagram of the screen display is included. (GL)

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USING APPLEWORKS V1.3 TO CONSTRUCT SPREADSHEET FILES FOR THE APPLE IIe COMPUTER

FIRST EDITION

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INTRODUCTION

"Using AppleWorks V1.3 To Construct Spreadsheed Files For The Apple IIe Computer" was developed for use as a "how to" training device. It can be used with Apple IIe computers which have a Duodisk or two disk drives. Its development was accomplished using an Apple Duodisk drive, 5 1/4" floppy disks, and the 1.3 Version of the AppleWorks program. The pictures one sees in the Figures of this document are those that will be seen when V1.3 of the AppleWorks program is used for the construction of spreadsheet files. Generally, other versions of the AppleWorks program, as well as the smaller disk drives presently available on the market, may be used in conjunction with the document. If the document is to be used as it was intended at the time of development, users must have the following items available to them:

1. Apple IIe computer.

2. A Duodisk or two disk drives.

3. AppleWorks startup and AppleWorks program disks. These items may be located on opposite sides of the same computer disk.

4. One data disk.

Users must know how to turn on the computer if this document is to be used as it was intended.

After using this document, Apple IIe computer operators should be able to construct spreadsheet files using V1.3 of the AppleWorks program. Additional guidance in this regard may be found in the AppleWorks program manual which accompanies the purchase of the program. Manuals are also available from many bookstores.

Mistakes found in this document are our's.

RMS
DSS

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S

DIRECTIONS

01. Program Loading.

a. Place the AppleWorks program (Version 1.3), startup disk in slot #1 of the Duodisk drive or drive #1 if two separate drives are used. If you are not sure which disk drive has been connected as drive #1, place the program in one of the two drives. The computer will normally search both drives for the program disk.

b. Turn on the computer and load the program into the computer. This step may require using two disks, one the startup disk and one the program disk or turning the startup disk over (watch for directions at the bottom of the monitor screen) if the startup and program portions are on opposite sides of the same disk, or:

c. If the machine is already energized, insert the disk and press and hold down the OPEN-APPLE and the CONTROL keys and while they are held down:

d. Press and release the RESET key and then release the OPEN-APPLE and the CONTROL keys (remember, you still may need to insert the second disk or turn the disk over).

e. With this task completed, your screen should look like Figure 1 (the "Main Menu" is on the screen).

(1) In the upper left corner of the screen, you should find the numeral "2" following the second word "Disk." If this is the case, proceed to step 05, omitting steps 02 through 04, after doing the following:

a. With the "Add Files" highlighted, press the RETURN key once. The picture on the monitor screen changes to look like that shown in Figure 5.

(2) If the numeral is "1" in the upper left hand corner, you should proceed directly to step number 02 see Figure 2).

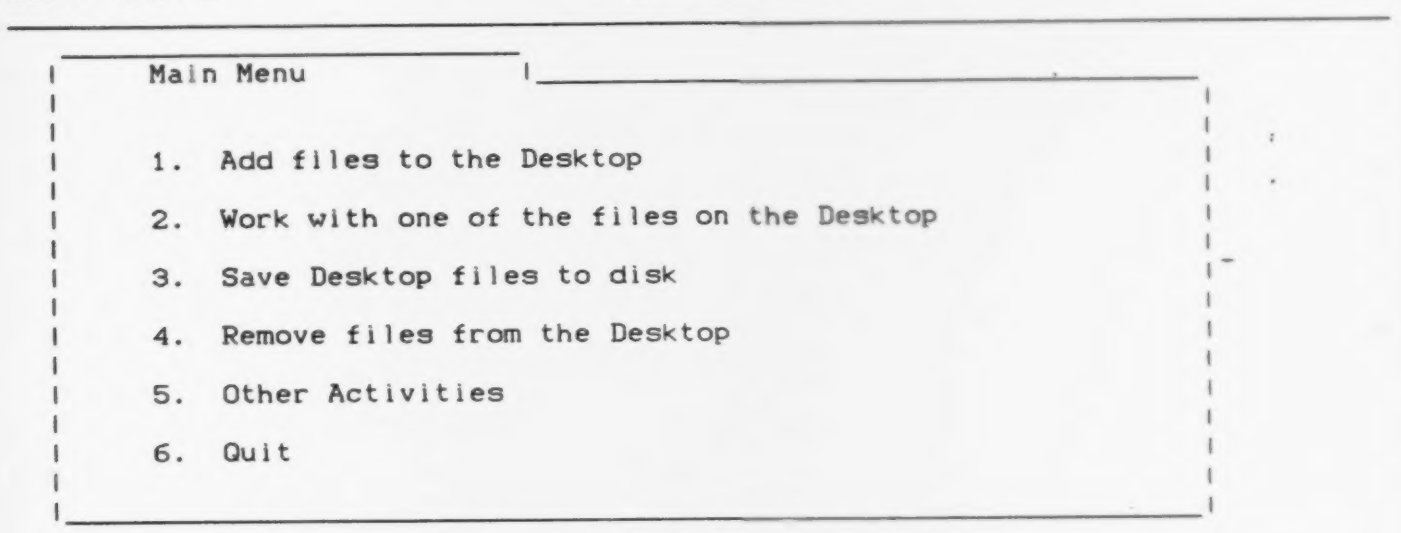
Disk: Disk 2
MAIN MENU
Main Menu
1. Add files to the Desktop
2. Work with one of the files on the Desktop
3. Save Desktop files to disk
4. Remove files from the Desktop
5. Other Activities
6. Quit
Type number, or use arrows, then press Return
?-? for Help

Figure 1. The Computer Screen With Disk Drive Two Selected.

02. Disk #1 Selected. If the screen looks like the picture shown in Figure 2 (note the #1 in the upper left corner of the Figure), select option #1, "Add files to the Desktop," from the "Main Menu." This is accomplished as follows:

a. Press the RETURN key once. Following this action, the screen should shift so that it appears like the picture shown in Figure 3.

03. Selecting A Different Disk. Select option #2, "A different disk" from the "Add Files" menu as follows:

a. Press the DOWN-ARROW key once.

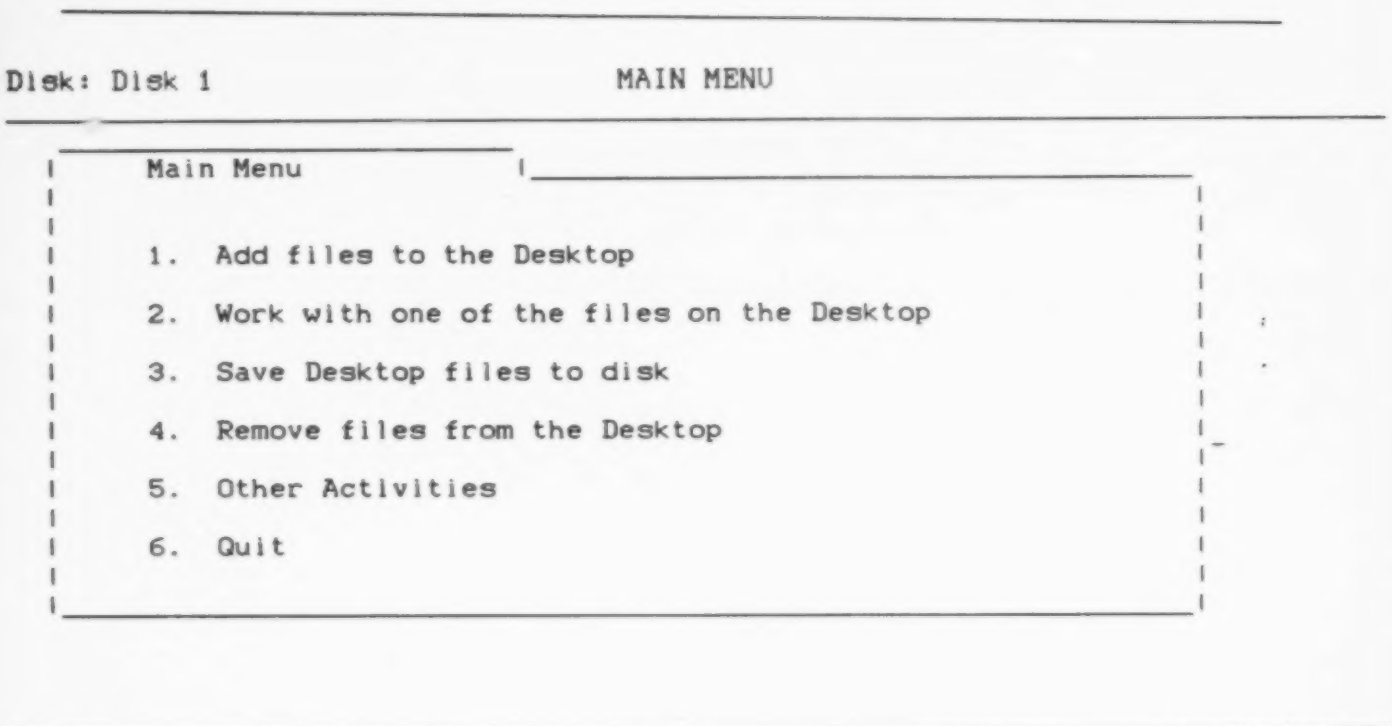
Disk: Disk 1
MAIN MENU
Main Menu
1. Add files to the Desktop
2. Work with one of the files on the Desktop
3. Save Desktop files to disk
4. Remove files from the Desktop
5. Other Activities
6. Quit
Type number, or use arrows, then press Return
@-? for Help

Figure 2. Computer Screen With "Disk: Disk 1" Selected.

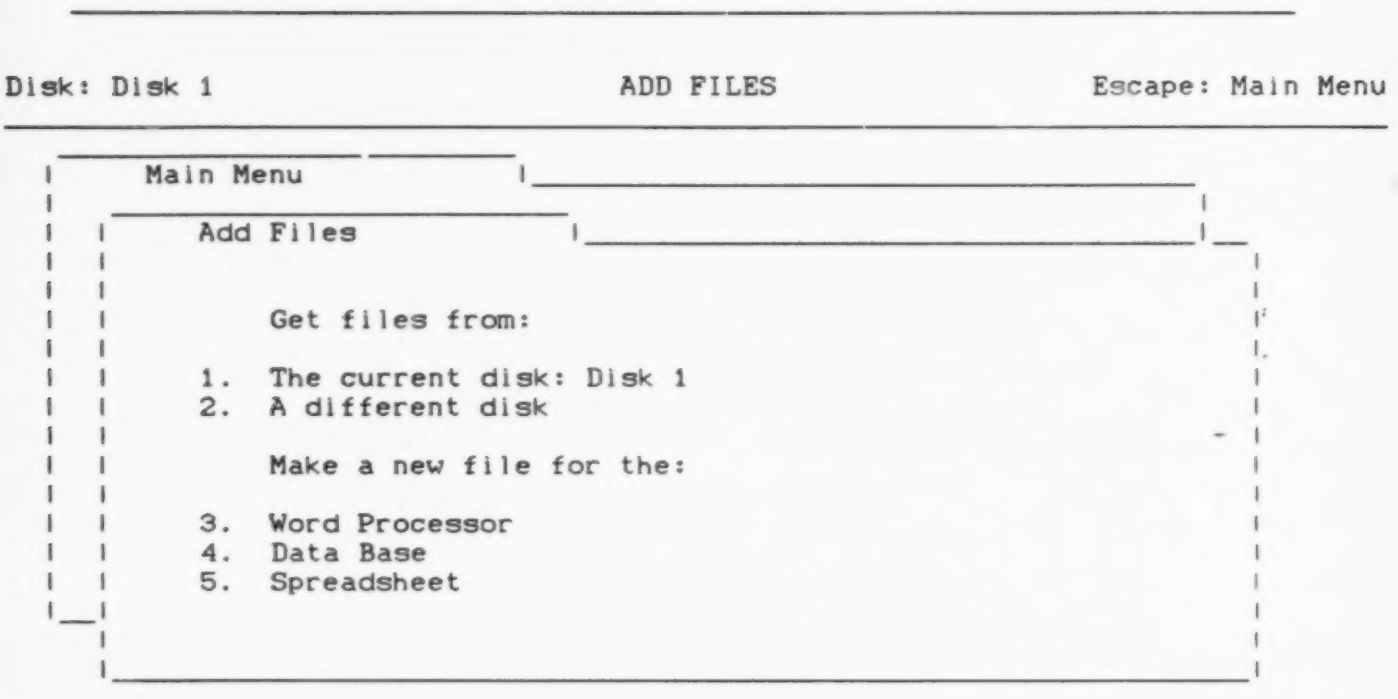

Figure 3. The Screen After Choosing, "Add files to the Desktop" Option From The "Main Menu".

b. Press the RETURN key once. The monitor screen should look like the picture shown in Figure 4.

04. Selecting Disk 2. Select option 2, "Disk 2" as follows:

a. Press the DOWN-ARROW key once.

b. Press the RETURN key once. The screen should have changed following this action so that it appears like the example shown in Figure 5, with the "Add Files" menu on the monitor screen . Note that the numeral "1" in the upper left corner of the screen has changed to "2."

c. We are now ready to move into spreadsheet file construction.

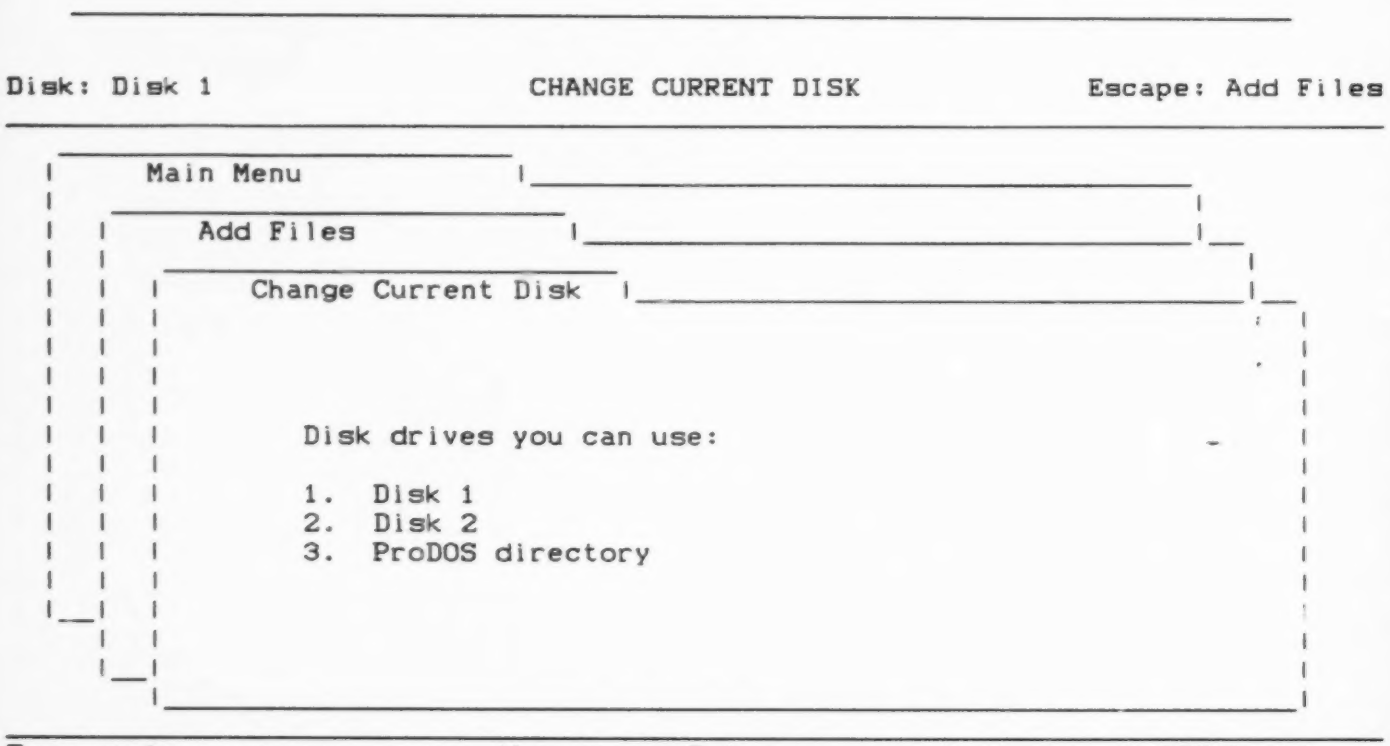

Figure 4. The Monitor Screen After Selecting The "A different disk" Option.

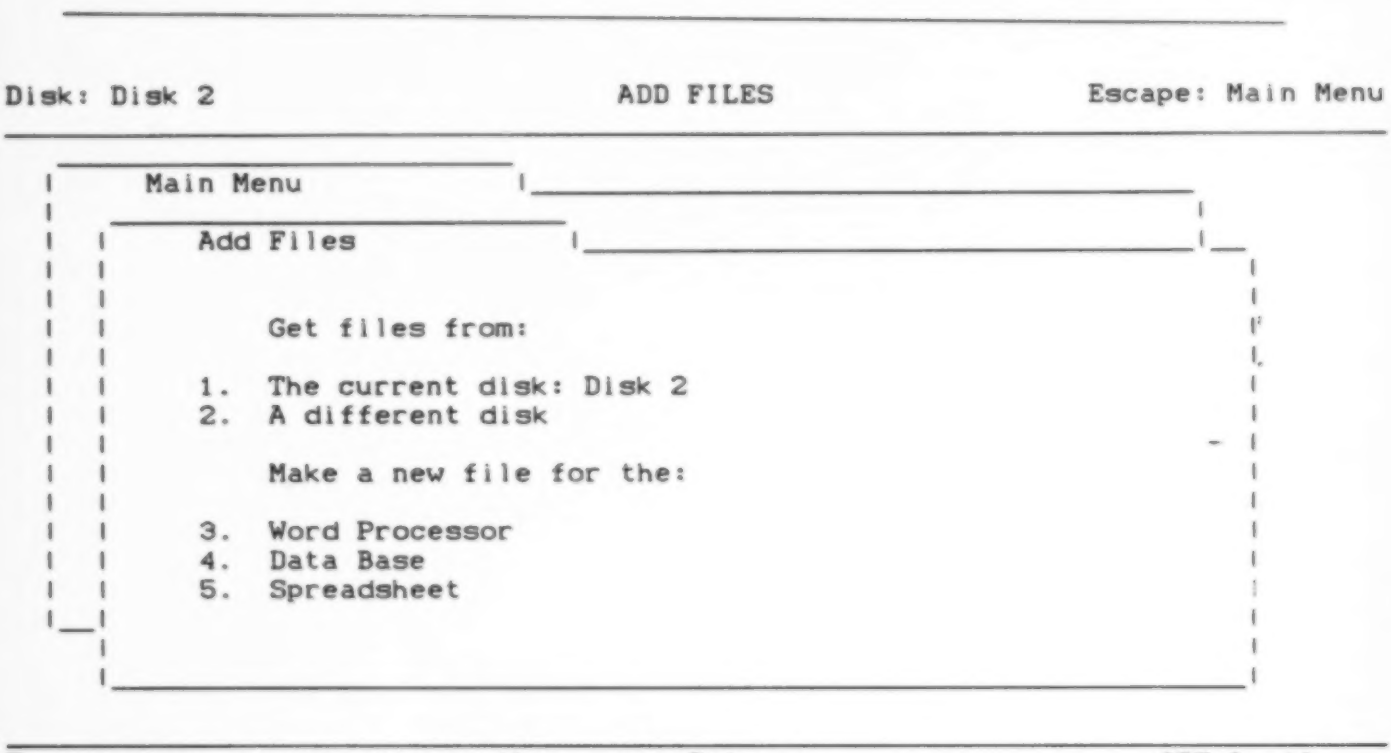

Figure 5. The Monitor Screen Showing The Add Files Menu After Selecting Disk #2.

05. Selecting the Spreadsheet Option.

a. Press the DOWN-ARROW key several times until the "Spreadsheet" option is highlighted.

b. Press the RETURN key once. The monitor screen should appear like Figure 6.

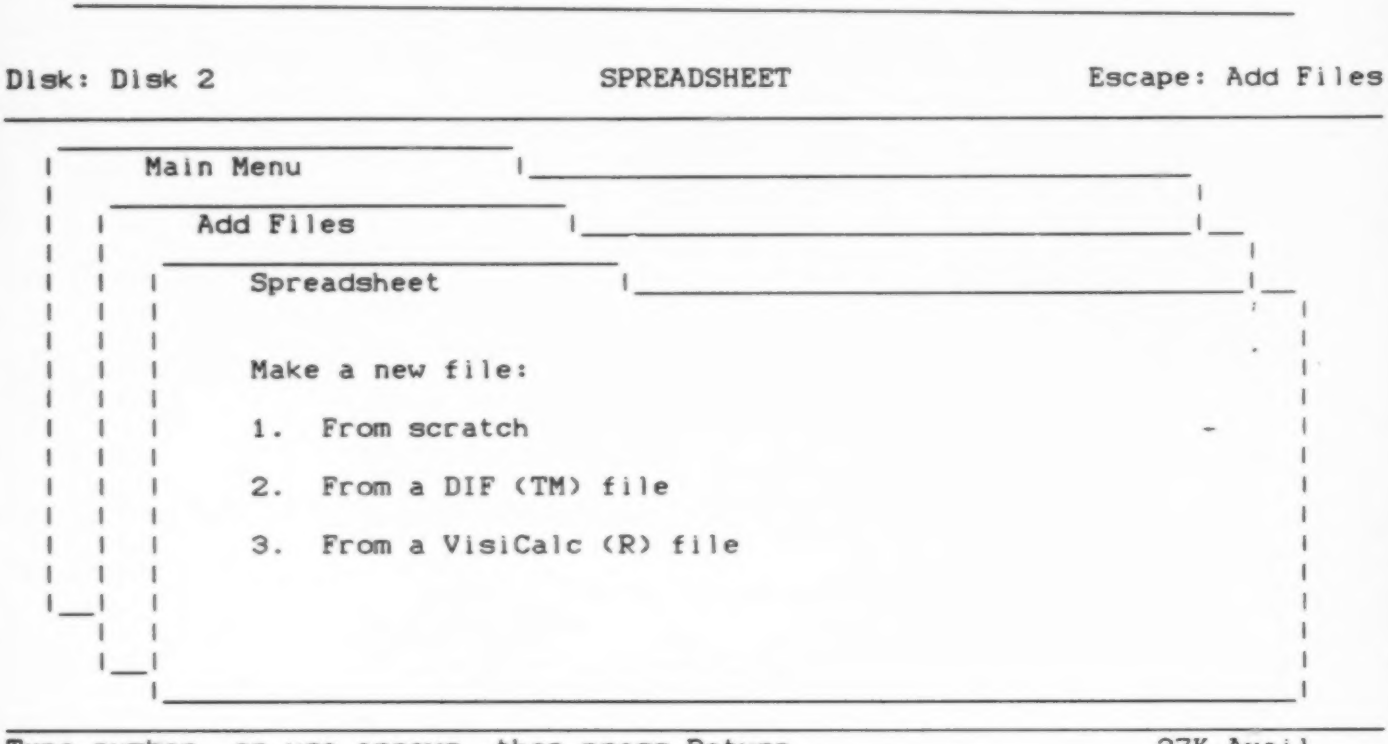

Figure 6. The Monitor Screen After Selecting The Spreadsheet Option.

c. From Scratch.

(1) Insure the "From scratch" option is highlighted.

(2) Press the RETURN key once (see Figure 7).

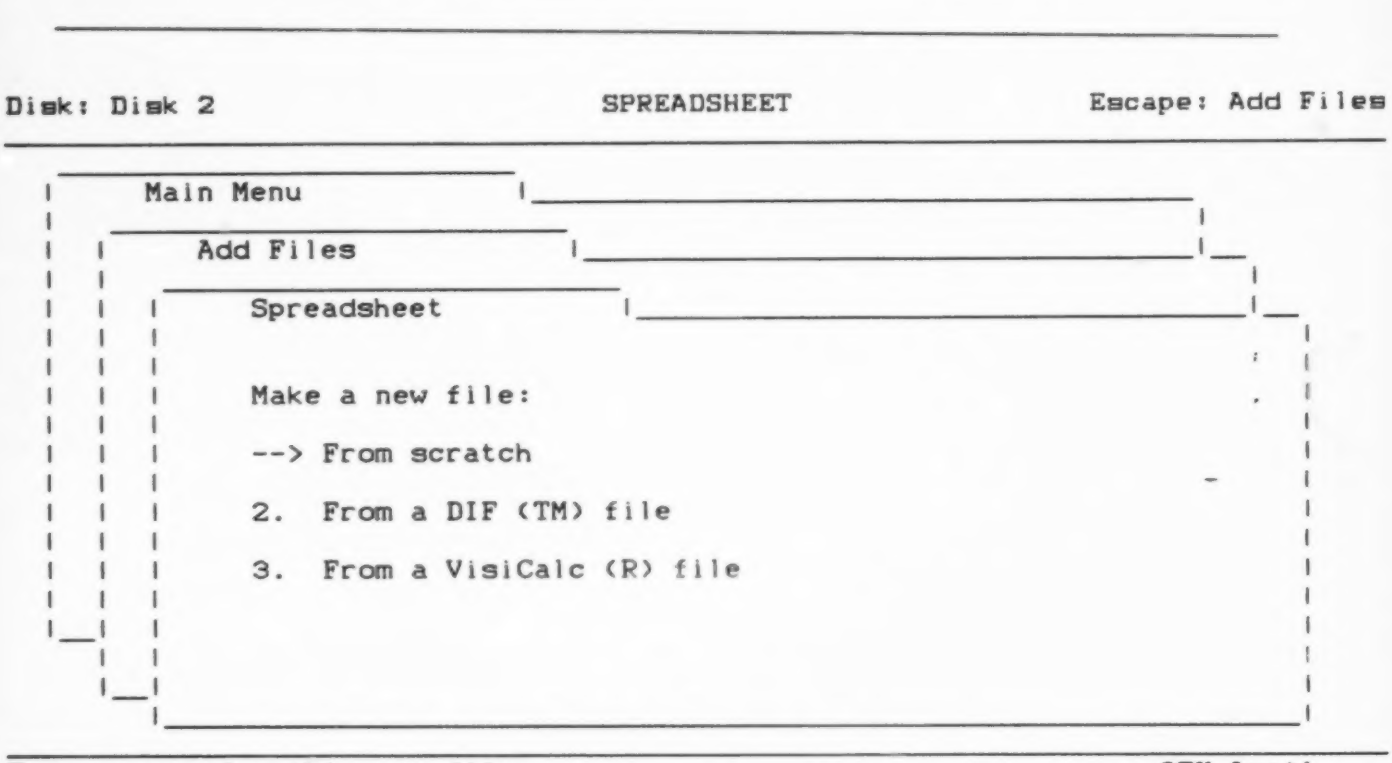

Figure 7. The Montior Screen Showing The From Scratch Option.

(3) Type the name you want your spreadsheet to have. Figure 8 is an example of the way the file might look after typing the new file name.

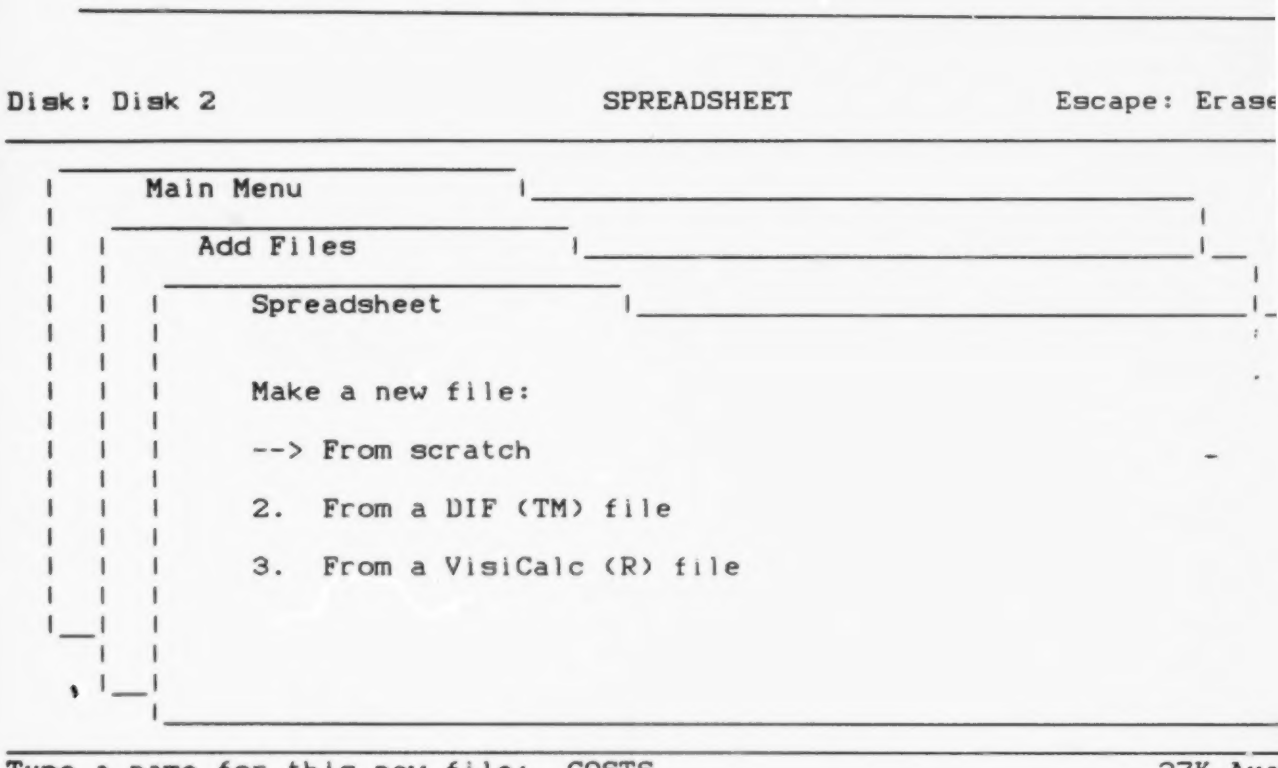

Figure 8. The Monitor Screen Showing The File Name Typed.

(4) Press the RETURN key once to enter the new file name an then examine Figure 9.

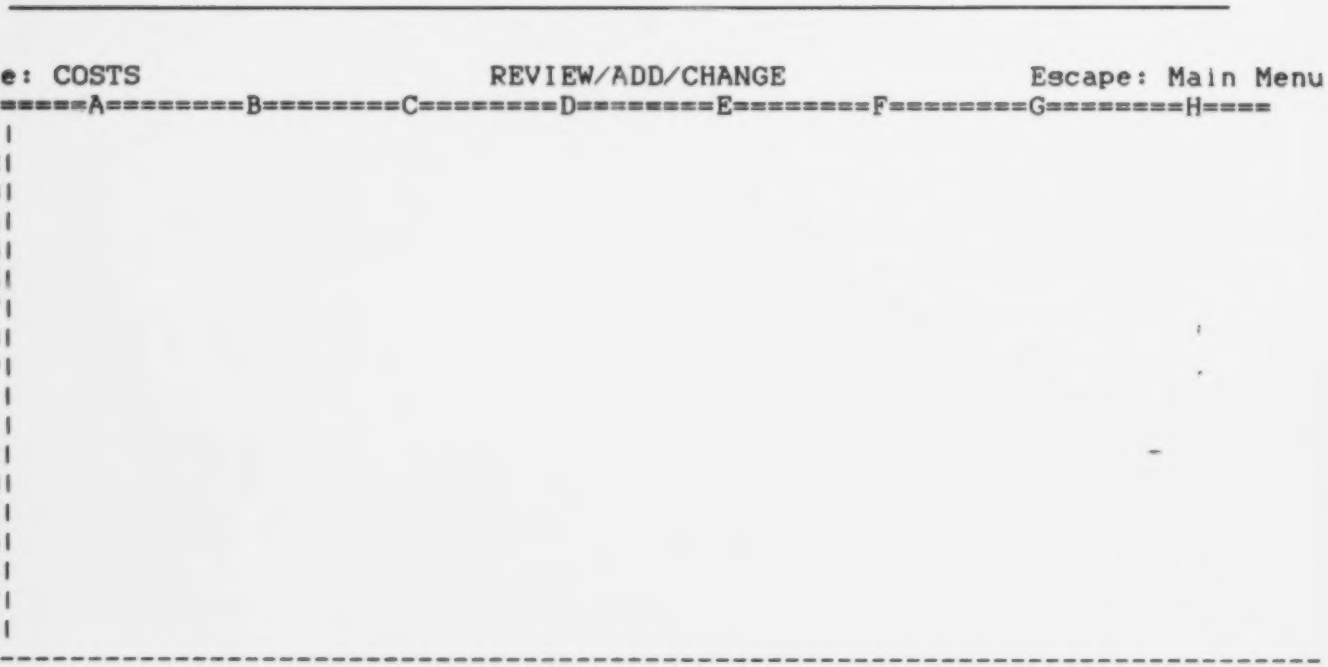

Figure 9. The Monitor Screen Showing The File Name Entered.

06. Spreadsheet File Construction.

a. Setting Column (top-to-bottom) Widths (standard width is 9 characters but may be set from 1-75 characters).

(1) Decide how many characters wide you want your spreadsheet columns to be.

(2) Press the OPEN-APPLE and the "V" keys at the same time. Your monitor screen will change and appear similar to the picture shown in Figure 10.

```
File: COSTS                          STANDARD VALUES        Escape: Review/Add/Change
========A========B========C========D========E========F========G========H====
  1|
  2|
  3|
  4|
  5|
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
A1

Standards?  Value format  Label format  Column width  Protection  Recalculate
```

Figure 10. The Monitor Screen With The Value Option Selected.

(3) Press the RIGHT-ARROW key several times until the "Column width" option is highlighted.

(4) Press the RETURN key once and examine Figure 11.

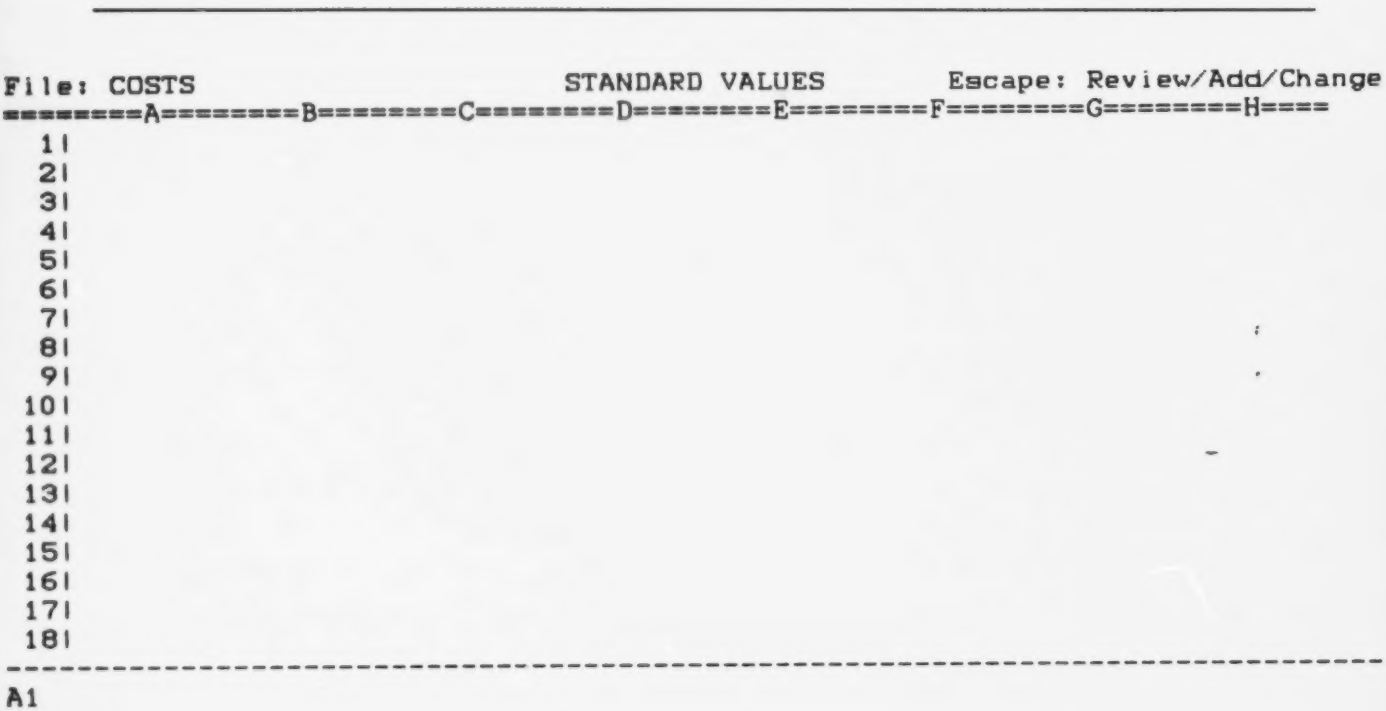

Figure 11. The Monitor Screen With the "Column Width" Option Selected.

(5) Press and hold down the OPEN-APPLE key and while it is held down, press the RIGHT-ARROW key 11 times (the column width will change to 20 characters as noted by the increased distance between letters at the top of the monitor screen - see Figuure 12).

Figure 12. The Monitor Screen Showing The Change In Column Widths.

(6) Press the RETURN key once to enter the new column width (see Figure 13).

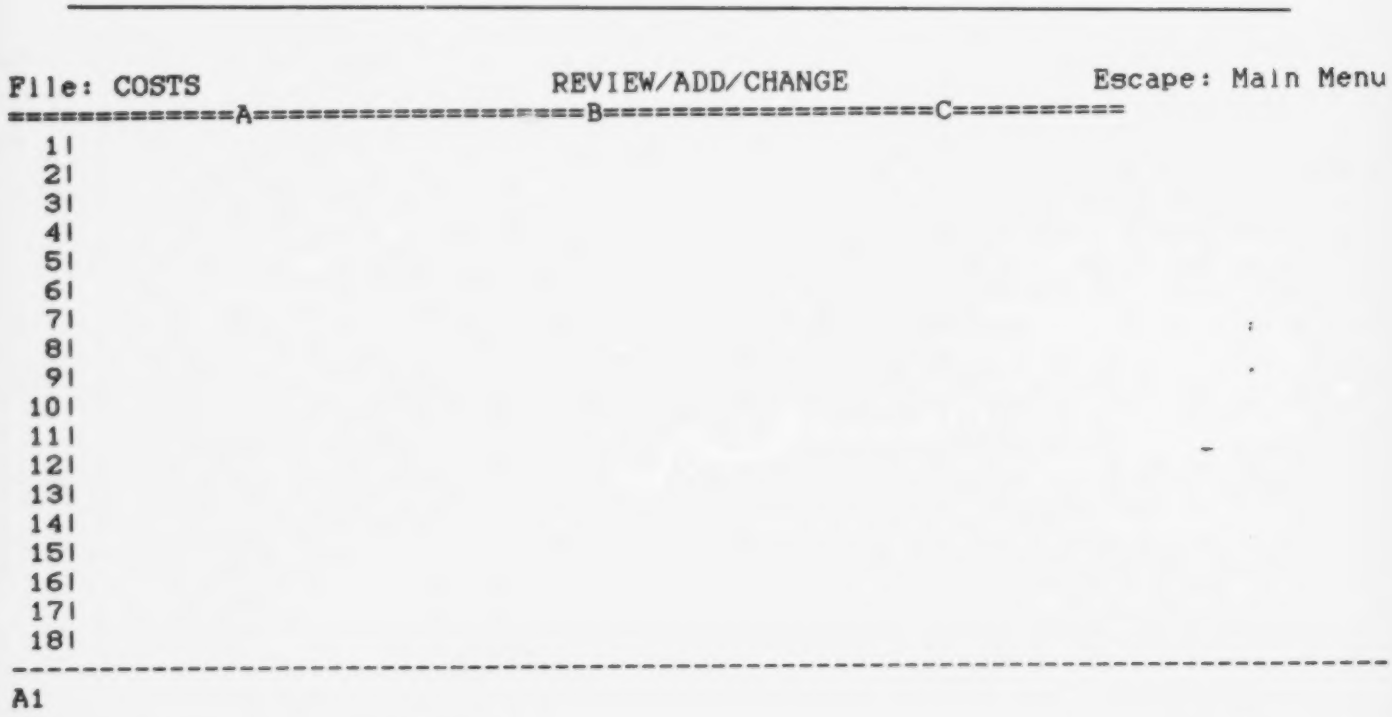

Figure 13. The Monitor Screen After Entering The Change In Column Width.

b. Naming Columns or Fields.

(1) Insure that the top of the first c olumn is highlighted. If it is not, use a combination of ARROW keys to highlight it.

(2) Type the word, "EVENT" or some other word or words you wish to use as a column title and then examine the example in Figure 14.

```
File: COSTS                    REVIEW/ADD/CHANGE          Escape: Erase entry
============A====================B====================C==========
  1|EVENT
  2|
  3|
  4|
  5|
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
A1
Label: EVENT
Complete the label                                              19K Avail.
```

Figure 14. The Monitor Screen With The Category "A" Title Typed.

(3) Notice where the word, "LABEL" is located on the screen.

(4) Press the RETURN key and examine the changes. The monitor screen should appear similar to the example in Figure 15.

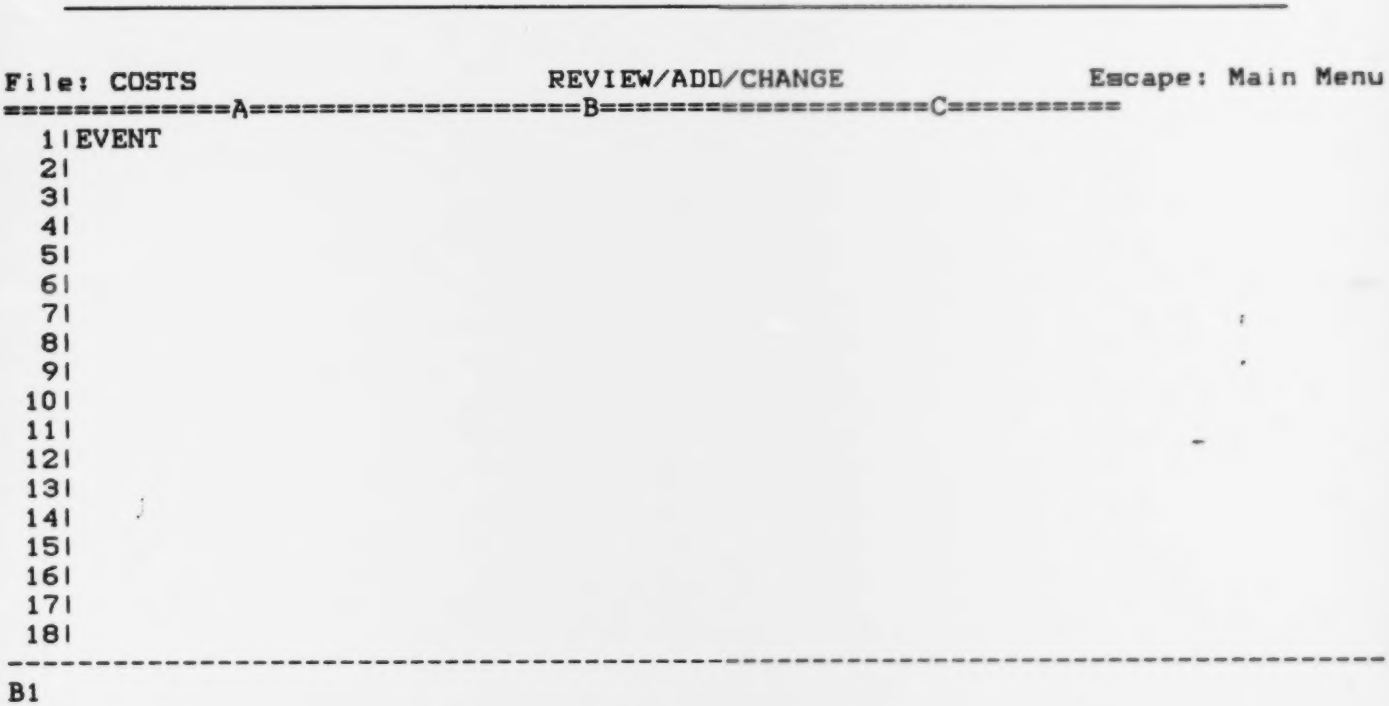

Figure 15. The Monitor Screen Showing Category "A" Title Entered.

(5) Press the RIGHT-ARROW key once.

(6) Type the word, "DATE" or some other word for the title of category or field "B."

(7) Press the RIGHT-ARROW key once and then compare Figures 15 and 16.

```
File: COSTS                          REVIEW/ADD/CHANGE                Escape: Main Menu
=============A====================B====================C==========
  1|EVENT                  DATE
  2|
  3|
  4|
  5|
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
C1

Type entry or use @ commands                                        @-? for Help
```

Figure 16. The Monitor Screen After Names Have Been Entered For Categories "A" And "B."

(8) Name the remaining categories of your spreadsheet.

c. Entering Category Information.

(1) Highlight row 2 under category "A" by using a combination of DOWN- and LEFT-ARROW keys. You should now have cell A2 (the intersection of a column and a row) highlighted. You can always tell if you are making an entry in the correct cell by closely examining the monitor screen.

(2) Examine Figure 17.

```
File: COSTS                    REVIEW/ADD/CHANGE                Escape: Main Menu
=============A====================B====================C====================D=====
  1|EVENT                DATE                  COSTS              OVERHEAD
  2|
  3|
  4|
  5|
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
A2

Type entry or use @ commands                                    @-? for Help
```

Figure 17. The Monitor Screen Showing Cell A2 Highlighted.

(3) Type the word "TRIP" (or some other information) in cell A2.

(4) Press the RIGHT-ARROW key once, entering the word, "TRIP," which moves the highlight to cell B2.

(5) Type the following or some other date, beginning with the day first (for example 06JUN89 or 89JUN06). See Figure 18.

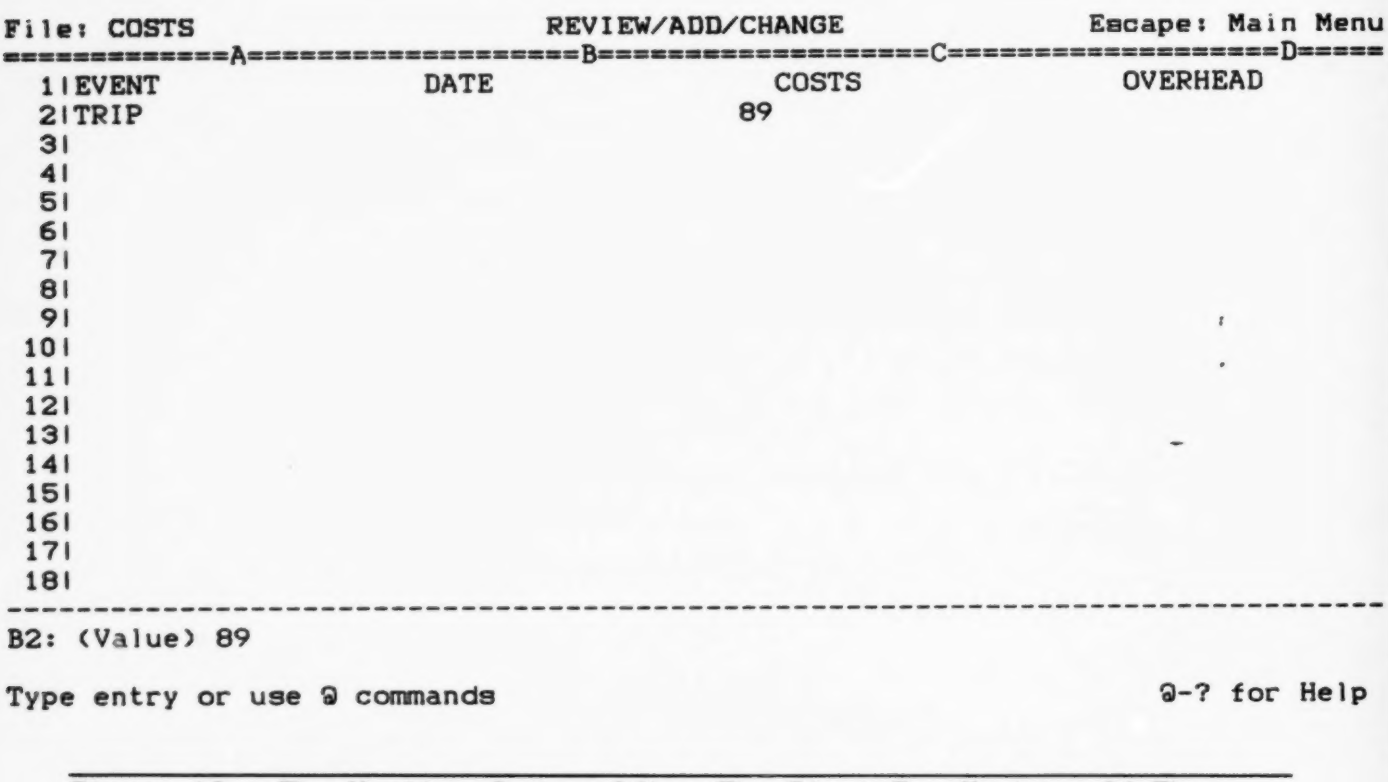

Figure 18. The Monitor Screen After The First Two Numbers Of The Date Have Been Typed.

(6) Examine the screen and note the word, VALUE. You were not able to type anything in the column beyond the first two numbers.

(7) Press the DOWN-ARROW key once.

(8) Type the date but this time start by typing the month first (for example JUN 06, 89) and then examine Figure 19.

```
File: COSTS                    REVIEW/ADD/CHANGE          Escape: Erase entry
============A===================B==================C==================D=====
  1|EVENT                 DATE                  COSTS              OVERHEAD
  2|TRIP                                         89
  3|                     JUN 06, 89
  4|
  5|
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
-------------------------------------------------------------------------------
B3
Label: JUN 06, 89
Complete the label                                              19K Avail.
```

Figure 19. The Monitor Screen Showing The Date Typed A Second Time.

(9) Press the DOWN-ARROW key once.

(10) Type 6/06/89 and examine Figure 20.

```
File: COSTS                          REVIEW/ADD/CHANGE                Escape: Erase entry
=============A====================B====================C====================D=====
  1|EVENT                 DATE                    COSTS                 OVERHEAD
  2|TRIP                                          89
  3|                      JUN 06, 89
  4|
  5|
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
-------------------------------------------------------------------------------
B4
Value: 6/06/89
Complete the value
```

Figure 20. The Monitor Screen Showing The Date Typed A Different Way.

(11) Press the DOWN-ARROW key once and look at Figure 21.

```
File: COSTS                        REVIEW/ADD/CHANGE              Escape: Main Menu
=============A====================B====================C==========
  1|EVENT                  DATE                    COSTS
  2|TRIP                                            89
  3|                       JUN 06, 89
  4|                                    .011236
  5|
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
B5

Type entry or use @ commands                                        @-? for Help
```

Figure 21. The Monitor Screen After Entering 6/06/89.

(12) Press the SHIFT key and while holding it in the depressed position, press the " key once. Notice in Figure 22 that the word LABEL has appeared on the screen.

```
File: COSTS                        REVIEW/ADD/CHANGE              Escape: Erase en
============A====================B====================C==========
  1|EVENT                  DATE                    COSTS
  2|TRIP                                            89
  3|                       JUN 06, 89
  4|                                        .011236
  5|
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
B5
Label:
Complete the label                                                  27K Avail
```

Figure 22. The Monitor Screen Showing The Results Of The SHIFT-" Action.

(13) Type 6/06/89.

(14) Press the DOWN-ARROW key once and examine Figure 23.

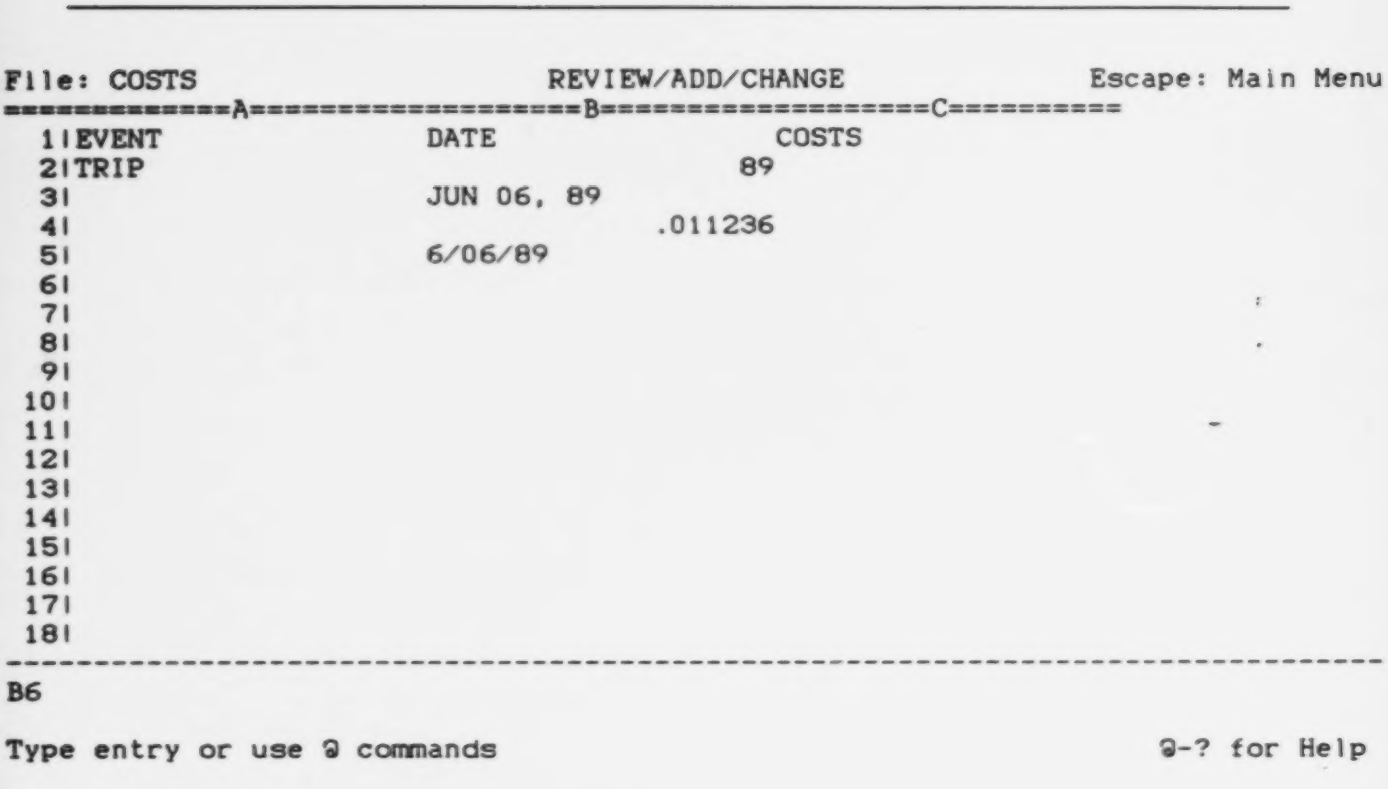

Figure 23. The Monitor Screen After Entering 6/06/89 Following Execution Of The SHIFT-" Action.

d. Justifying Labels and or Values.

(1) Press the OPEN-APPLE and the "V" keys at the same time. Then examine Figure 24.

```
File: COSTS                        STANDARD VALUES        Escape: Review/Add/Change
=============A====================B====================C==========
  1|EVENT                  DATE                    COSTS
  2|TRIP                                          89
  3|                       JUN 06, 89
  4|                                    .011236
  5|                       6/06/89
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
-------------------------------------------------------------------------------
B6

Standards?  Value format  Label format  Column width  Protection  Recalculate
```

Figure 24. The Monitor Screen With The Value Option Selected.

(2) Use the RIGHT-ARROW key to highlight the "Labels Format" option.

(3) Press the RETURN key once (see Figure 25).

```
File: COSTS                          STANDARD VALUES        Escape: Review/Add/Change
=============A====================B====================C==========
  1|EVENT                  DATE                    COSTS
  2|TRIP                                            89
  3|                       JUN 06, 89
  4|                                        .011236
  5|                       6/06/89
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
-------------------------------------------------------------------------------
B6

Label format?  Left justify  Right justify  Center
```

Figure 25. The Monitor Screen After Selecting The Labels Format Option.,

(4) Use the RIGHT-ARROW key to highlight the "Right Justify" option.

(5) Press the RETURN key (see Figure 26).

```
File: COSTS                          REVIEW/ADD/CHANGE              Escape: Main Menu
=============A====================B====================C==========
  1|                  EVENT                      DATE                    COSTS
  2|                   TRIP                        89
  3|                                          JUN 06, 89
  4|                                             .011236
  5|                                             6/06/89
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
B6

Type entry or use / commands                                        /-? for Help
```

Figure 26. The Monitor Screen After Selecting The "Right Justify" Option.

(6) Press the UP-ARROW key to move the cursor to cell B4, passing through cell B5.

(7) Look at the lower left corner of the monitor screen. Note that both values and labels are right justified (see Figure 27).

```
File: COSTS                          REVIEW/ADD/CHANGE                Escape: Main Menu
=============A====================B====================C==========
  1|                  EVENT                      DATE                    COSTS
  2|                   TRIP                        89
  3|                                          JUN 06, 89
  4|                                             .011236
  5|                                             6/06/89
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
B4: (Value) 6/6/89

Type entry or use @ commands                                        @-? for Help
```

Figure 27. The Monitor Screen Showing Values Right Justified.

e. Centering Labels.

(1) Move the cursor to cell C1.

(2) Press the OPEN-APPLE and the "V" keys at the same time.

(3) Press the RIGHT-ARROW key to highlight "Label Format."

(4) Press the RETURN key once and then examine Figure 28.

```
File: COSTS                        STANDARD VALUES        Escape: Review/Add/Change
============A====================B====================C==========
  1|                  EVENT                    DATE                    COSTS
  2|                   TRIP                      89
  3|                                         JUN 06, 89
  4|                                           .011236
  5|                                           6/06/89
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
C1: (Label) COSTS

Label format?  Left justify  Right justify  Center
```

Figure 28. The Monitor Screen After Selecting the Label Format.

(5) Press the RIGHT-ARROW key to highlight the "Center," option.

(6) Press the RETURN key once (see Figure 29).

```
File: COSTS                    REVIEW/ADD/CHANGE              Escape: Main Menu
============A==================B==================C==========
  1|        EVENT                  DATE                    COSTS
  2|         TRIP                                 89
  3|                           JUN 06, 89
  4|                                  .011236
  5|                           6/06/89
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
C1: (Label) COSTS

Type entry or use @ commands                                    @-? for Help
```

Figure 29. The Monitor Screen Showing The Column Labels Centered.

f. Setting Up Columns For Figures.

(1) Place the cursor in cell C2.

(2) Press the OPEN-APPLE and the "V" keys at the same time.

(3) Insure that the value format is highlighted.

(4) Press the RETURN key and examine Figure 30.

```
File: COSTS                          STANDARD VALUES        Escape: Review/Add/Change
=============A====================B====================C==========
  1|        EVENT                    DATE                    COSTS
  2|         TRIP                                  89
  3|                             JUN 06, 89
  4|                                    .011236
  5|                              6/06/89
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
-------------------------------------------------------------------------------
C2

Value format?  Fixed  Dollars  Commas  Percent  Appropriate
```

Figure 30. The Monitor Screen With The Value Format Selected.

(5) Highlight the "Dollars" option.

(6) Press the RETURN key. Figure 31 shows the results of this action.

```
File: COSTS                        STANDARD VALUES        Escape: Review/Add/Change
=============A====================B====================C==========
  1|        EVENT                    DATE                  COSTS
  2|         TRIP                                  89
  3|                              JUN 06, 89
  4|                                     .011236
  5|                               6/06/89
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
C2

How many decimal places? (0-7)  0                                    27K Avail.
```

Figure 31. The Monitor Screen Showing The Dollars Option Selected.

(7) Press the numberal "2" key and look at Figure 32.

```
File: COSTS                          STANDARD VALUES              Escape: Erase entry
=============A====================B====================C==========
  1|        EVENT                      DATE                    COSTS
  2|         TRIP                                  89
  3|                                JUN 06, 89
  4|                                        .011236
  5|                                 6/06/89
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
C2

How many decimal places? (0-7)  2                                    27K Avail.
```

Figure 32. The Monitor Screen After Typing The Numeral "2."

(8) Press the RETURN key once (see Figure 33).

```
File: COSTS                        REVIEW/ADD/CHANGE                Escape: Main Menu
             A                    B                    C
  1|       EVENT                  DATE                 COSTS
  2|        TRIP                          $89.00
  3|                             JUN 06, 89
  4|                                        $.01
  5|                              6/06/89
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
C2

Type entry or use @ commands                                      @-? for Help
```

Figure 33. The Monitor After Entering 2 Decimal Places.

(9) Enter the following figures in cells C2, C3, and C4 respectively; 2, 3, 4. Your monitor screen probably looks like the example shown in Figure 34.

```
File: COSTS                        REVIEW/ADD/CHANGE                Escape: Main Menu
============A====================B====================C==========
  1|        EVENT                        DATE                        COSTS
  2|         TRIP          89                          2
  3|                                JUN 06, 89         3
  4|                       6/6/89                      4
  5|                             6/06/89
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
C5

Type entry or use @ commands                                        @-? for Help
```

Figure 34. The Monitor Screen Showing Entries In Cells C2, C3 And C4.

(10) Regardless of the way your monitor screen appears, press the OPEN-APPLE and the "Z" keys at the same time. The result of this action will either produce a screen that looks like Figure 34 or 35.

```
File: COSTS                        REVIEW/ADD/CHANGE                Escape: Main Menu
============A====================B====================C==========
  1|        EVENT                      DATE                      COSTS
  2|         TRIP                              $89.00                    $2.00
  3|                                 JUN 06, 89                          $3.00
  4|                                                $.01                 $4.00
  5|                                  6/06/89
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
C5

Type entry or use @ commands                                        @-? for Help
```

Figure 35. The Monitor Screen Showing Dollar Values.

g. Setting Column and Line Totals.

(1) Use the DOWN-ARROW key and highlight cell C18.

(2) Type @SUM(C2...C17) and look at Figure 36.

```
File: COSTS                        REVIEW/ADD/CHANGE                Escape: Erase
             A                    B                    C
  1|        EVENT                  DATE                 COSTS
  2|         TRIP                        $89.00                    $2.00
  3|                                  JUN 06, 89                   $3.00
  4|                                        $.01                   $4.00
  5|                                   6/06/89
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|
--------------------------------------------------------------------------------
C18
Value: @SUM(C2...C17)
Complete the value
```

Figure 36. The Monitor Screen Showing A Typed Formula.

(3) Press the RETURN key and examine Figure 37. The program will now give you a running sum of the entries in cells C2 through C17.

```
File: COSTS                    REVIEW/ADD/CHANGE              Escape: Main Menu
             A                    B                    C
  1|       EVENT                 DATE                 COSTS
  2|        TRIP                          $89.00                    $2.00
  3|                              JUN 06, 89                        $3.00
  4|                                        $.01                    $4.00
  5|                             6/06/89
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|                                                               $9.00
--------------------------------------------------------------------------------
C18: (Value) @SUM(C2...C17)

Type entry or use @ commands                                    @-? for Help
```

Figure 37. The Monitor Screen Showing The Sum.

(4) Press the OPEN-APPLE and the "Z" keys and examine your cell, C18, formula (see Figure 38).

```
File: COSTS                        REVIEW/ADD/CHANGE                Escape: Main Menu
============A====================B====================C==========
  1|        EVENT                        DATE                        COSTS
  2|         TRIP          89                          2
  3|                                JUN 06, 89         3
  4|                       6/6/89                      4
  5|                             6/06/89
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|                                                 @SUM(C2...C17)
-------------------------------------------------------------------------------
C18: (Value) @SUM(C2...C17)

Type entry or use @ commands                                      @-? for Help
```

Figure 38. The Monitor Screen Showing The Cell C18 Formula.

(5) Use the ARROW keys and move the cursor to cell C5.

(6) Suppose for some reason, you show a loss here of $3.50; type -3.50.

(7) Press the RETURN key and examine Figure 39. Note that there is a new running total shown in cell C18, and the program has entered the negative quantity in parentheses rather than showing a minus sign.

```
File: COSTS                    REVIEW/ADD/CHANGE              Escape: Main Menu
            A                    B                    C
 1|       EVENT                 DATE                 COSTS
 2|        TRIP                          $89.00              $2.00
 3|                            JUN 06, 89                    $3.00
 4|                                   $.01                   $4.00
 5|                             6/06/89                     ($3.50)
 6|
 7|
 8|
 9|
10|
11|
12|
13|
14|
15|
16|
17|
18|                                                         $5.50
-------------------------------------------------------------------------------
C5: (Value) -3.5

Type entry or use @ commands                                  @-? for Help
```

Figure 39. The Monitor Screen Showing The Results Of Adding A Negative Quantity.

(8) Use the ARROW keys and move the cursor to cell D2.

(9) Type $2.00.

(10) Use the ARROW key and move the cursor to cell E2.

(11) Type @SUM(C2...D2).

(12) Press the RETURN key once and look at Figure 40. The example you see is the sum of the values in the 2nd row between columns "C" and "D."

```
File: COSTS                        REVIEW/ADD/CHANGE                Escape: Main Menu
============C====================D====================E==========
  1|       COSTS                  OVERHEAD
  2|              $2.00                  $2.00              $4.00
  3|              $3.00
  4|              $4.00
  5|             ($3.50)
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|              $5.50
-------------------------------------------------------------------------------
E2: (Value) @SUM(C2...D2)

Type entry or use @ commands                                    @-? for Help
```

Figure 40. The Monitor Screen Showing The Summation of C2 + D2.

(13) Move the Cursor to cell D3 and type 2.

(14) Press the RIGHT-ARROW key once to move the cursor to cell E3.

(15) Suppose the quantity to be entered in this cell is the product of the quntities entered in cells C3 and D3.

(16) Type @SUM(C3*D3).

(17) Press the RETURN key and examine Figure 41.

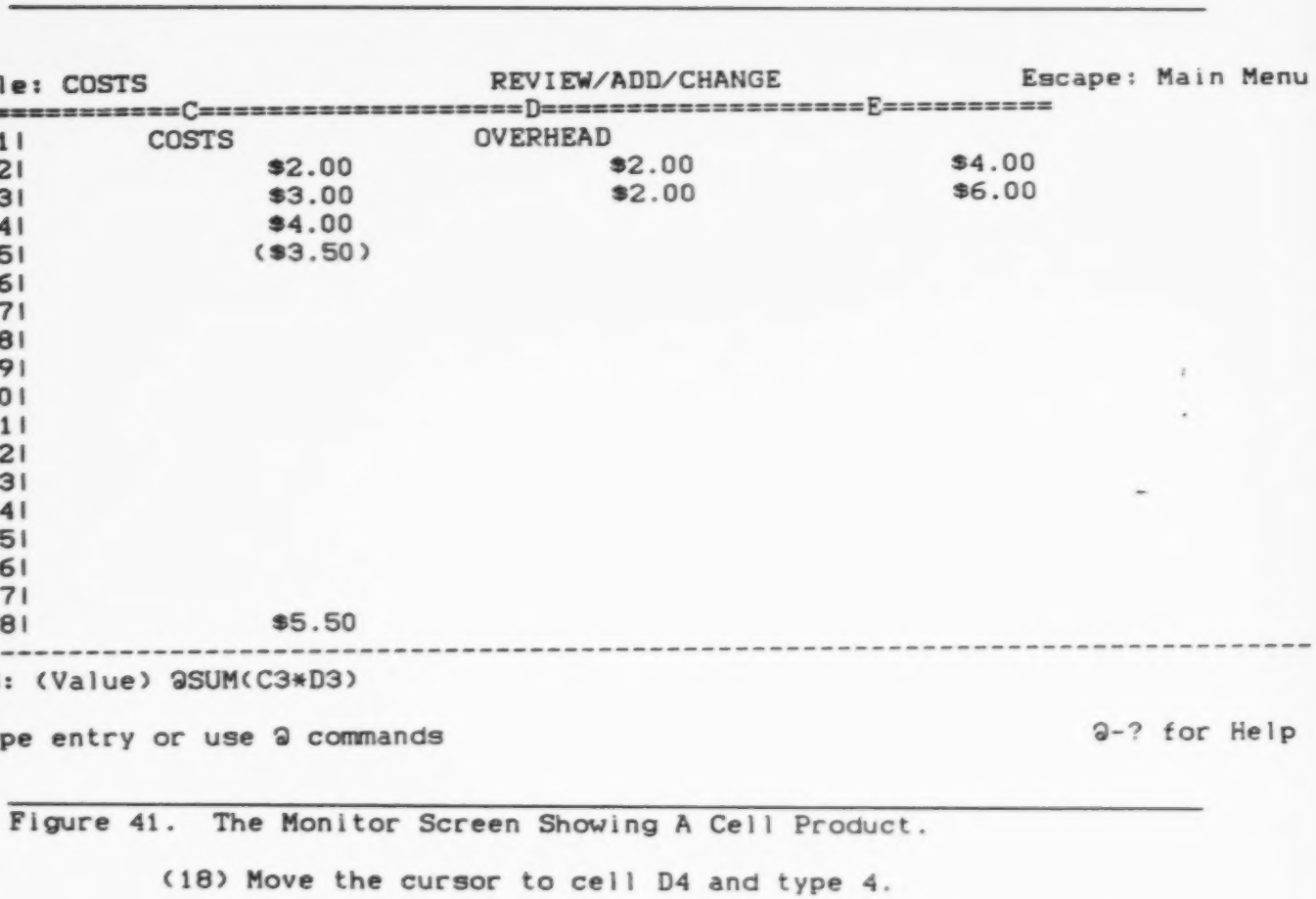

Figure 41. The Monitor Screen Showing A Cell Product.

(18) Move the cursor to cell D4 and type 4.

(19) Press the RIGHT-ARROW key once to move the cursor to cell E4.

(20) Suppose the quantity in this cell is to be the quotient of the quantity entered in cell C4 divided by the quantity entered in cell D4.

(21) Type @SUM(C4/D4).

(22) Press the RETURN key and examine Figure 42.

```
File: COSTS                    REVIEW/ADD/CHANGE              Escape: Main Menu
=============C====================D====================E==========
  1|       COSTS                  OVERHEAD
  2|              $2.00                  $2.00                $4.00
  3|              $3.00                  $2.00                $6.00
  4|              $4.00                  $4.00                $1.00
  5|             ($3.50)
  6|
  7|
  8|
  9|
 10|
 11|
 12|
 13|
 14|
 15|
 16|
 17|
 18|              $5.50
-------------------------------------------------------------------------------
E4: (Value) @SUM(C4/D4)

Type entry or use @ commands                                   @-? for Help
```

Figure 42. The Monitor Screen Showing A Cell Quotient.

07. Continuing. Some very elaborate spreadsheets can be constructed. You are now ready to construct and use your own basic spreadsheet. Additional spreadsheet details are available in the AppleWorks program manual.